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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,173	09/24/2002	Michael J. Collins	1700.89C	4893

21176 7590 07/13/2004

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EXAMINER

GAKH. YELENA G

ART UNIT PAPER NUMBER

1743

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/065,173	COLLINS ET AL.	
	Examiner	Art Unit	
	Yelena G. Gakh, Ph.D.	1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Amendment filed on 04/19/04 is acknowledged. Claims 3 and 4 are cancelled. Claims 1-2 are pending in the Application.

Response to Amendment

2. The pending claims stay rejected on the same grounds as were established in the previous Office action.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. **Claims 1-2** are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson (AOSTRA J. Res.) in view of Collins (US 4,554,132) or Bostian et al. (J. Assoc. Off. Anal. Chem.) and Jerosch-Herold et al. (US 5,289,124).

Thompson discloses samples for NMR measurements comprising an organic portion containing at least some fats and oils placed in thimbles with thimble holders made of Teflon (page 137, right column, Equipment).

Thompson does not specifically disclose the samples placed on low mass, porous, hydrophilic and lipophilic pad, made e.g. of glass fibers, or drying samples one after another.

Collins or Bostian disclose a fat and oil sample placed on a sample pad transparent to microwave radiation and free of protons, of low mass, porous, hydrophilic and lipophilic (e.g. glass fiber filter (Collins, col. 5, line 5), Bostian, page 876, right column). The fat and oil samples are partially melted, since they are placed in a microwave.

It would have been obvious for anyone of ordinary skill in the art to slightly modify Thompson's samples by using pads disclosed by Collins or Bostian instead of thimbles, because such pads are more efficient for holding oil-and fat-containing samples disclosed by Collins and Bostian and therefore expand the range of possible samples.

Thompson in view of Collins or Bostian do not particularly disclose a sheet material free of protons which wraps the sample on the pad.

Jerosch-Herold discloses samples for NMR relaxation measurements sealed with Teflon tape in order to preserve the samples.

It would have been obvious for anyone of ordinary skill to slightly modify Thompson- Collins/Bostian's sample by wrapping it with the Teflon wrapper, as taught by Jerosch-Herold, because in both cases the Teflon wrapper preserves the sample and prevents absorbing additional water or losing moisture content of the sample.

Response to Arguments

7. Applicant's arguments filed 04/19/04 have been fully considered but they are not persuasive. Thompson invention is directed toward analysis of organic, rather than inorganic sample, contrary to the Applicant's remarks. Petroleum oil is a mixture of organic compounds. Moreover, petroleum oil contains fatty acids and often is used as their source. The examiner did not apply Thompson's reference as indicating using Teflon wrapper, which is clearly stated in the rejection. Therefore, remarks regarding Teflon rod are not relevant to the subject matter of the rejection. Arguments regarding applying Collins or Bostain are not clear. The examiner did not apply these references to indicate that the wrapped sheet was used. She rather used the references to indicate a different shape of the sample holder, which is more convenient for food fats and oils, which expands the range of Thompson's samples to food fats and oils, instead of limiting them to petroleum fats and oils. The arguments regarding Jerosch-Herold are repeated from the Applicant's remarks from the previous Office action; therefore the examiner's arguments remain the same. Jerosch-Herold discloses Teflon wrapper exactly for the same reasons as the instant invention, i.e. to preserve the samples from the influence of an external environment, especially changing the water content. Hence, there is a direct motivation for anyone of ordinary skill in the art to use Teflon wrapper for Thompson-Collins/Bostian's samples in order to perform NMR relaxation studies without the effect of the external environment exactly the same way Jerosch-Herold discloses for his samples.

The next two paragraphs of the remarks incorrectly interpret examiner's rejections as using Jerosch-Herold's disclosure as a primary reference. That is not what is stated in the rejections. Jerosch-Herold's reference is used exclusively to indicate obviousness of using Teflon wrapper for the NMR sample, which prevents water content of the sample to be changed. This is the purpose of Jerosch-Herold's, as well as the instant invention. Using Teflon wrapper is obviously justified for the samples, for which the water content is essential for their NMR measurements, independent of whether this change is caused by evaporation or absorption of water.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

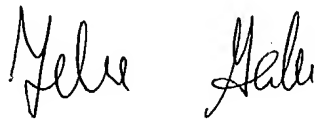
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yelena G. Gakh, Ph.D. whose telephone number is (571) 272-1257. The examiner can normally be reached on 9:30 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Yelena G. Gakh
7/8/04

Handwritten signature of Yelena G. Gakh in cursive script.